REMARKS

The Applicants request reconsideration of the final rejection mailed March 4, 2004.

Claims 1-22 are now pending, including Claims 19-22 newly filed with this preliminary amendment.

The Applicants' representative thanks the Examiner for the courtesies extended during the office interview of September 15, 2004, during which the invention as disclosed was distinguished over the applied prior art to Liu et al., U.S. 5,898,780 (Liu). In the discussions that took place during the interview, the Applicants' representative formed the opinion that the examination to date did not fully consider certain features which the Applicants deemed to be provide clear advancement and advantages over the prior art of record. Accordingly, with the help of the Examiner and the Examiner's supervisor, the Applicants have prepared amendments to the pending claims, and added new Claims 19-22, which are believed to fully distinguish the invention from the prior art as represented by Liu.

In particular, Claim 1 (for example) claims a network relaying apparatus including means for storing correspondence

information indicating a correspondence between each I/O port and a network address of each network terminal connected to each of the I/O ports and packet relaying means for determining a destination of each packet received via the I/O ports on a basis of the correspondence information, and for instructing packet communicating means to transmit the received packets to the determined destination, wherein the packet relaying means operates to learn whether there is correspondence between an I/O port which has received a packet and the source network address identified in the packet based on the source network address contained in the received packet, to request authentication information for a source network terminal having the source network address if the stored correspondence information relating to the connecting state of the source network terminal is required by the result, to instruct a user authenticating means to execute user authentication for user authentication information received in response to the request, and to change the stored correspondence information and cause the received packet to be relayed to the destination if the user is authenticated to be correct. In Liu, the Applicants believe that the "username"@ "userdomain" associates "username" with "userdomain" simply to discriminate a particular user of a domain. The I/O port and

network address of a network terminal connected to the I/O port appear to have no association with username or userdomain in Liu.

Furthermore, despite the assertion in the Office Action, the remote user authentication server 14 of Liu does not correspond to the claimed means for storing user authentication information. Rather, remote user authentication server 14 includes a host table module 58 which contains listing by domain name of internet service providers who have an account with the local internet service provider. The host table module does not hold user authentication information. To obtain the authentication, the remote user authentication server 14 must request authentication from the home internet service provider 64, which stores the necessary information. Accordingly, the remote user authentication server of Liu does not hold the authentication information or perform the authentication.

In addition, Liu does not appear to show the required correspondence between I/O port and a network address of a network terminal. Rather, Liu shows correspondence between a port and an internet protocol (IP) address of a home server, but not between the port of a network relaying apparatus and the network address of the terminal. As such, Liu can perform

authentication processing as to a packet between contracted internet service providers having accounts with each other, wherein the packet uses the domain name of a contracted provider, but the authentication processing of Liu is performed as to an access query using a domain name searched against a list. In contrast, the present claims require that the correspondence between the I/O port of the network relaying apparatus and the network address of the network terminal coupled to the port be held so that movement of a user can be managed by using the correspondence between the ports and the network addresses. Liu neither teaches nor suggests this feature.

Indeed, Liu discloses no port changing at all (i.e., no change in correspondence information providing a correspondence an I/O port and a network terminal address). Advantageously, this feature of the present invention permits a network manager to freely set network addresses, providing a greater flexibility than that achievable by the prior art.

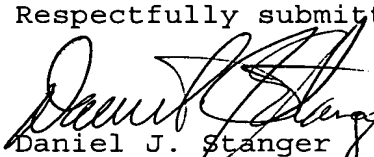
New Claim 19 recites a network relaying apparatus that broadens the expression of a preferred embodiment of the present invention, compared with Claim 1. Claim 19 retains the requirement that the network relaying apparatus store a host table containing information which is referenced to

determine whether a received packet should be relayed to a determined destination, and information which includes a correspondence between an I/O port that received the packet and a network address of the network terminal that sent the packet to the network relaying apparatus.

New Claims 20-22 are also directed to a network relaying apparatus which is believed to provide a broader scope of protection than that set forth in Claim 1. Claims 20-22 retain the limitation that the correspondence between an I/O port that has received a packet and a source address contained in the received packet forms the basis for requiring user authentication.

In view of the foregoing amendments, remarks, and new claims, the Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,



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